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Attorney's Docket No.: 12967-002001

OFFICIAL COMMUNICATION

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FOR THE PERSONAL ATTENTION OF:
EXAMINER ROBERT KUNEMUND

GROUP 1765 FAX NO: (703) 872-9310

Number of pages including this page 4

Applicant : Tomohiro Kawase et al
Serial No. : 09/824,965

Filed : April 3, 2001

Reissue Application of:

Patent No. : 6,007,622
Issue Date : December 28, 1999
Serial No. : 08/843,124
Filed : April 25, 1997
Title : Method Of Preparing Group III-V Compound Semiconductor CrystalArt Unit : 1765
Examiner : Robert Kunemund

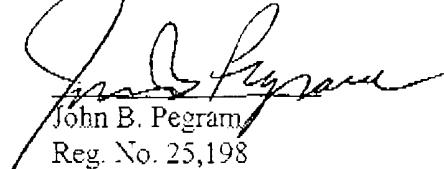
FACSIMILE COMMUNICATION

Commissioner for Patents
Washington, D.C. 20231

Sir:

Attached to this facsimile communication cover sheet is a Response To Protest, faxed this 8th day of May, 2002, to Group 1765, the United States Patent and Trademark Office.

Respectfully submitted,


John B. Pegram
Reg. No. 25,198

Date: May 8, 2002

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Art Unit : 1765

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Title : METHOD OF PREPARING GROUP III-V COMPOUND
SEMICONDUCTOR CRYSTALCommissioner for Patents
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RESPONSE TO PROTEST

Applicant's undersigned attorneys have received a copy of a Protest Under 37 C.F.R. 1.291, apparently filed by mail on April 30, 2002 by Michael A. Molano. (If the Examiner wishes to have Applicant supply a copy of the Protest, due to mail delays, please contact Applicant's undersigned attorney.)

We recognize Mr. Molano as an attorney who has represented AXT, Inc. in negotiations with Applicant relating to the subject of this application.

The Protest asserts that claim 1 of this Reissue Application is anticipated by European Patent Application 0 417 843 A2 ("Kremer EP"). That reference was previously called to the Examiner's attention in an Information Disclosure Statement by the Applicant. This Response supplements the statements made in that IDS.

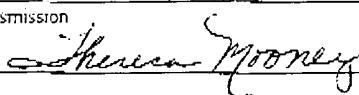
CERTIFICATE OF TRANSMISSION BY FACSIMILE

I hereby certify that this correspondence is being transmitted by facsimile to the Patent and Trademark Office on the date indicated below.

May 8, 2002

Date of Transmission

Signature



Theresa Mooney

Typed or Printed Name of Person Signing Certificate

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Claim I of the present application is as follows:

1. A method of preparing a carbon-doped group III-V compound semiconductor crystal, comprising the steps of:

placing a compound raw material, solid carbon, and a boron oxide substance into a crucible or a boat,

sealing said crucible or boat containing said compound raw material, said solid carbon, and said boron oxide substance within an airtight vessel formed of a gas impermeable material,

heating and melting said compound raw material in said crucible or said boat sealed within said airtight vessel, and

solidifying said melted compound raw material to grow a carbon-doped compound semiconductor crystal,

wherein an amount of said solid carbon placed into said crucible or said boat is larger than an amount of carbon doped into said compound semiconductor crystal.

It appears that the Protest does not appreciate that claim I is a method claim and that Kremer EP does not satisfy the first, second and last of its limitations.

The first claim limitation requires the step of placing three substances into a crucible or boat: semiconductor compound raw material, solid carbon and a boron oxide substance. We do not find that step in Kremer EP and the Protest does not point to such a step of putting all three substances in the same crucible or boat for performing the method.

The second claim limitation is related to the first. It is the step of sealing of a crucible or boat containing all three of those substances within an airtight vessel. We do not find that step in Kremer EP and the Protest does not point to such a step of sealing all three substances in the same crucible or boat for performing the method.

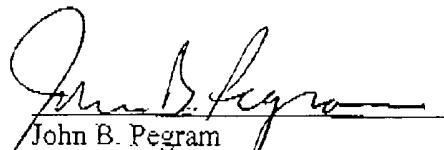
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The last claim limitation requires that the amount of solid carbon placed into the crucible or boat is larger than an amount doped into the compound semiconductor crystal by the claimed method. We do not find that step in Kremer EP and the Protest does not address the quantity of carbon to be put in a boat in the comparative Example using solid carbon.

At pages 12-13, the Protest also asserts that claim 1 is obvious from Kremer EP under 35 U.S.C. § 102(a). The claim is not obvious for reasons stated in the IDS and herein. In particular, we point out that the Protest's obviousness argument is based on its anticipation argument, which is defective in the several ways noted above. The Protest fails to take into account the fact that Kremer EP teaches away from the claimed method, by teaching away from use of a boron oxide substance and by providing evidence of superior results in Kremer's method when solid carbon is not used. Finally, the Protest's obviousness arguments fail to address the objective evidence (or secondary considerations) of non-obviousness.

Respectfully submitted,



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